## SPECIFICATION

o   On page 1, after line 1, insert the following heading:

### FIELD OF THE INVENTION

o   On page 1, after line 4, insert the following heading:

### BACKGROUND OF THE INVENTION

o   On page 1, after line 8, insert the following heading:

### SUMMARY OF THE INVENTION

o   Amend paragraph beginning at page 1, line 15, as follows:

The invention may thus provide a flexible distortion reduction system which is capable of implementing relatively complex forms of distortion correction. The generation of reduced frequency components in the extracted portion of the input signal facilitates the use of digital signal processing in the generation and adaptation of the distortion signal for combination with the input signal to achieve ~~the best possible~~ distortion reduction therein. Since the lineariser according to <u>certain embodiments of</u> the invention does not rely on local oscillator signals or any other form of reference from the host system of which it is a part, it can be implemented as a stand alone subsystem. This can be a significant benefit in many applications. It could even be located remotely from the rest of the system (e.g. a cellular radio base station).

o   On page 2, after line 14, insert the following heading:

### BRIEF DESCRIPTION OF THE DRAWINGS

o   On page 3, after line 5, insert the following heading:

### DETAILED DESCRIPTION

o   Amend paragraph beginning at page 5, line 23, as follows:

In the main signal path, the RF power amplifier 210 is proceeded <u>by</u> a vector modulator 244. The predistortion signal from DSP 218 is supplied to the Q channel mixer 246 of vector modulator 244. The DC signal introduced to the predistortion signal by controller 236 at combiner 240 allows mixer 246 to leak an appropriate amount of the RF input signal energy through the Q channel mixer. Similarly, the I channel mixer 248 is supplied with a DC signal from controller 236 to leak an appropriate amount of the inphase component of the RF input signal energy through that mixer. The mixers 246 and 248 operating on the quadrature-split channels of the input signal allow the input signal vector to be steered through a full 360° and a range of amplitude levels. It is therefore possible to arrange the main input signal vector appropriately to match the predistortion signal vector which is only fed to the Q channel mixer as shown (alternatively, the predistortion signal could be supplied to the I channel mixer or to both the I and Q channel mixers).